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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,609	12/20/2001	Jason F. Hunzinger	09752-149001	4538

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HARNESS, DICKEY & PIERCE, P.L.C.  
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EXAMINER

CHOW, CHARLES CHIANG

ART UNIT	PAPER NUMBER
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2685

10

DATE MAILED: 05/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/029,609

Applicant(s)

HUNZINGER, JASON F.

Examiner

Charles Chow

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 18-27, 44-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-27, 44-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**Office Action for  
Applicant's Amendment  
(March/03/2003)**

1. Regarding applicant's amendment based on the no teachings for the call connection request to determines a parameter which identifies a reason for the failure of a communication protocol; the number of times the same communication protocol fails the connection request; the parameter which identifies the failure has occurred and the number of times the failure has occurred for the connection request; the grounds of rejection is changed by including patent to Ghisler et al. (US 5,230,082) and Hunzinger et al. (US 6,501,947 B1).

Regarding the call connection request to determines a parameter which identifies a reason for the failure of a communication protocol;

Ghisler et al. (also as Ghisler in below) teaches reliable transmission of signaling message for a call connection, handoff (abstract, Fig. 4; col. 1, lines 14-20; col. 2, lines 20-28). Ghisler teaches the dynamic/adaptive channel allocation rule of the system (protocol) is violated by allowing adjacent base station to reuse the particular channels for handoff call connection (abstract; col. 1, lines 14-20; col. 2, lines 49-61). The violation of the channel reuse is one of the reason protocol fails, as indicated above. Ghisler also further indicates the violation of the system protocol for the channel reuse plan, during handoff, from original base station to target base station ((col. 10, lines 38-55) because of the channel reuse. Ghisler teaches the handoff, reconnection, to revert call connection from second base station to first base station (as shown in col. 14, lines 31-40).

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Regarding the number of times the same communication protocol fails the connection request; the parameter which identifies the failure has occurred and the number of times the failure has occurred for the connection request;

Hunzinger et al. (also as Hunzinger in below) teaches resource management for the call reconnection (abstract, figure in cover page). Hunzinger teaches the call reconnection number of request attempts, the collection of data to determining proper reconnection time (as shown in abstract). Hunzinger teaches the collection data for possible reason (parameter) includes resource capability, priority, client connection pending, timing, amount of data on pending connection request (abstract; col. 1, line 66 to col. 2, lines 62; col. 8, lines 1-57), for applicant's claimed features for the same protocol fails the connection request, and the parameter which identifies the failure has occurred and the number of times the failure has occurred for the connection request.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Spear (US 4,811,380) in view of Wicher et al. (US 5,608,643), and further in view of Ghisler et al. (US 5,230,082).

Regarding **claim 18**, Spear discloses a mobile station (Radio telephone unit 130, Fig. 1C) for

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use in wireless communication system (cellular radiotelephone system, Fig. 1A; col. 2, line 64; col. 2, line 58 to col. 3, line 18), for protecting dropped call, according to the determining means of the radio telephone 130 to request call reconnection (abstract; col. 1, lines 6-13; Fig. 4, reconnection 440).

Spear discloses a transceiver which transmits a connection request to the wireless comm. system (Fig. 1C, the receiver 144/transmitter 146 for transmitting of the call reconnection request, in abstract).

Spear discloses the microcomputer in supervisory unit 150 which determines the connection request fails (the radiotelephone comprising first means for determining the active call has been lost, to indicate to system of the request for reconnection of the lost call; col. 9, line 46 to col. 10, line 8).

Spear discloses the signal strength parameter is monitored for identifying the reason of the lost call or failure (in col. 5, lines 50-65, Fig. 1C, 156).

Spear does not clearly indicate the number of times the failure occurs.

Wichter discloses transmitted message having a parameter indicating a number of times that the reason has occurred; storing the parameter indicating the number of time that the reason has occurred (for the cellular radio network 12, Fig. 1, which comprises the dispensing unit 10 for maintaining the stock food level in the Bins). The dispensing unit 10 transmits/ receives information from the system controller 14 (col. 3, lines 59 to col. 4, line 5).

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Witcher teaches the dispensing unit 10 transmits communication-retry-counts and reason-code associated with the retried activity event to the controller 14, for the reconnection reasons (col. 8, lines 32-38). It would be obvious to include Wichter's transmitting of the retry count for establishing of the communication connection with the system controller 14, such that the system could be upgraded with the information of the retried communication counts and reason codes, such that the system could efficiently determine the reconnection attempt situation based on the retry counts and reasons. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Spear, and to include Wichter's retry count for establishing the communication link, such that the system could efficiently determine the reconnection attempt situation based on the received retry counts and reason code.

In the above, it does not clearly indicate the failure of a communication protocol.

Regarding the call connection request to determines a parameter identifying a reason for the failure of a communication protocol;

Ghisler teaches reliable transmission of signaling message for a call connection, handoff (abstract, Fig. 4; col. 1, lines 14-20; col. 2, lines 20-28). Ghisler teaches the dynamic/adaptive channel allocation rule of the system (protocol) is violated by allowing adjacent base station to reuse the particular channels for handoff call connection (abstract; col. 1, lines 14-20; col. 2, lines 49-61). The violation of the channel reuse is one of the reason protocol fails, as indicated above. Ghisler also further indicates the violation of the system protocol for the channel reuse plan, during handoff, from original base station to target base station

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((col. 10, lines 38-55) because of the channel reuse. Ghisler teaches the handoff, reconnection, to revert call connection from second base station to first base station (as shown in col. 14, lines 31-40). Ghisler provides the technique to temporarily modified channel signaling allocation protocol rule for reliable call connection (col. 1, lines 14-20), such that the system could efficiently establish the call connection. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Spear above, and to include Ghisler's temporary modification of the channel allocation protocol rule for reliable call connection signaling, such that the system could efficiently establish the call connection.

Regarding the failure from the same communication protocol, referring to Hunzinger below in claim 23.

3. Claims 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spear in view of Wicher, Ghisler, as applied to claim 18 above, and further in view of Tiedemann Jr. et al. (US 5,999,816).

In the above, it does not clearly indicate the using said stored parameters.

Regarding **claim 19**, Tiedemann teaches the adapting system access parameters using stored parameters (the method and apparatus for mobile assisted handoff, title, abstract). The mobile station transmits parameter data having pilot search list for reattempting of establishing connection to the wireless system, and the search list is the stored parameter in the mobile station, such that the mobile could transmit the search offset list to the system for establishing

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connection, col. 19, lines 46-65). It would be obviously to include Tiedemann's stored parameter data for establishing the connection, such that the system would efficiently provide the service based upon the received parameter information. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Spear above, and to include Tiedemann's stored parameter data for establishing the connection, to Spear as modified above, such that the system would efficiently provide the service based upon the received parameter information.

Regarding **claim 20**, Wichter has considered the connection request from the dispensing unit with the connection parameter for the retry counts and reason code, as shown in claim 18 above.

Regarding **claim 21**, referring to examiner's comment in Tiedemann that the transceiver receives instruction based on the parameter data and to determine a time to reattempt the connection or waiting for a interval after the attempt/reattempt connection in shown in col. 19, lines 46-65).

4. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Spear in view of Wicher, Ghisler, as applied to claim 18 above, and further in view of Amin et al. (US 5,995,830).

In the above it does not clearly indicate the reasons of the previously failed reconnection. Amin teaches **claim 22**, a system having mobile switching center 110, base station 114, mobile telephone 116, Fig. 1, abstract, title, for processing dropped calls. The system



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determines the reason that call has dropped, and whether to attempt the reconnection, as shown in col. 7, lines 13-25; col. 8, lines 47-58). Amin system considers the reasons as shown in table 1; col. 3, lines 51-63, col. 5, lines 1-18, such as those reason groups for mobile travel outside area; handoff with insufficient channels; coverage hole; MSC error; interference. It would be obvious to include Amin's reasons for the failed connections to Spear as modified above, such that the system could accurately recover the connection based on the failure reasons. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Spear above, and to include Amin connection lost listing as shown above, such that the system could accurately recover the connection based on the failure reasons.

5. Claims 23 -27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spear in view of Wicher, Ghisler, Amin, as applied to claims 22 above, and further in view of Hunzinger et al. (US 6,501,947 B1)

Regarding **claim 23**, referring to Amin above, for the system comprising the node for determining of the cause of dropped link (abstract, Fig. 1). Amin considers the determination of the reconnection for certain number of attempts within period of time (col. lines 20-28). Amin considers the sending status message to non-dropped device, abstract; the status message including the reason for identifying the dropped connection (col. 2, lines 9-12, his claims 2, 11, and table 1-2). Regarding the transmitting of the first connection request, Spear is, inherently if not obvious, teaches the transmitting of the first connection request from the

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radiotelephone 130. Spear also has shown above the second reconnection request for reconnection (in abstract), and Wichter has shown above for the parameter of the retry counts, reason code.

In the above, it does not clearly indicate the number of time for the failure of the same comm. protocol.

Regarding the amended portion for the number of times the same communication protocol fails the connection request; the parameter which identifies the failure has occurred and the number of times the failure has occurred for the connection request;

Hunzinger teaches resource management for the call reconnection (abstract, figure in cover page). Hunzinger teaches the call reconnection number of request attempts, the collection of data to determining proper reconnection time (as shown in abstract). Hunzinger teaches the collection of data for possible reason (parameter) which includes the resource capability, the priority, the client connection pending, the timing, the amount of data on pending connection request (abstract; col. 1, line 66 to col. 2, lines 62; col. 8, lines 1-57), for applicant's claimed features for the same protocol fails the connection request, and the parameter which identifies the failure has occurred and the number of times the failure has occurred. Hunzinger considers the reconnection based on the collected data information (col. 2, lines 10-21) such that the successfulness of the call reconnection could be efficiently implemented. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Spear above, and to include Hunzinger's reconnection based on the collected reasons, such that the call reconnection could be efficiently, successfully implemented.

Regarding **claim 24**, referring to examiner comment in claim Amin above for the number of time failed for particular parameter reason; and the failures parameter for reconnection in Table 1, and the included parameter having retry count, reason code from Wichter, for the next connection request.

Regarding **claim 25**, referring to examiner comment above for the receiving instruction for the next connection request from Amin (col. 8, lines 16-18, the sending a reconnection indication to the other device upon a successful reconnection).

Regarding **claim 26**, referring to examiner's comment in claim 22 above for the reason for the connection request failures group.

Regarding **claim 27**, referring to Amin for the modifying the aggressiveness of the connection request from Amin' analyzing a mobile assisted handoff list previously received from said wireless telephone (col. 8, lines 46-47).

***Response to Arguments  
And  
Conclusion***

6. Applicant's arguments with respect to claims 18-27, 44-47, have been considered but are moot in view of the new ground(s) of rejection.

Regarding applicant's amendment for no teachings for the call connection request to determines a parameter which identifies a reason for the failure of a communication protocol; the number of times the same communication protocol fails the connection request; the parameter which identifies the failure has occurred and the number of times the failure

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has occurred for the connection request; the grounds of rejection is changed by including patent to Ghisler and Hunzinger.

Regarding the call connection request to determines a parameter which identifies a reason for the failure of a communication protocol;

Ghisler teaches reliable transmission of signaling message for a call connection, handoff (abstract, Fig. 4; col. 1, lines 14-20; col. 2, lines 20-28). Ghisler teaches the dynamic/adaptive channel allocation rule of the system (protocol) is violated by allowing adjacent base station to reuse the particular channels for handoff call connection (abstract; col. 1, lines 14-20; col. 2, lines 49-61). The violation of the channel reuse is one of the reason protocol fails, as indicated above. Ghisler also further indicates the violation of the system protocol for the channel reuse plan, during handoff, from original base station to target base station ((col. 10, lines 38-55) because of the channel reuse. Ghisler teaches the handoff, reconnection, to revert call connection from second base station to first base station (as shown in col. 14, lines 31-40).

Regarding the number of times the same communication protocol fails the connection request; the parameter which identifies the failure has occurred and the number of times the failure has occurred for the connection request;

Hunzinger teaches resource management for the call reconnection (abstract, figure in cover page). Hunzinger teaches the call reconnection number of request attempts, the collection of data to determining proper reconnection time (as shown in abstract). Huzinger teaches the

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collection data for possible reason (parameter) includes resource capability, priority, client connection pending, timing, amount of data on pending connection request (abstract; col. 1, line 66 to col. 2, lines 62; col. 8, lines 1-57), for applicant's claimed features for the same protocol fails the connection request, and the parameter which identifies the failure has occurred and the number of times the failure has occurred for the connection request.

In view of the disclosures, claims 18-27, 44-47 are remaining in the rejection manner.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Chow whose telephone number is (703)-306-5615.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

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Edward Urban, can be reached at (703)-305-4385.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231


or faxed to: (703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or  
proceeding should be directed to the Technology Center 2600 Customer Service Office  
whose telephone number is (703) 306-0377.

Charles Chow

April 26, 2003.

  
EDWARD F. URBAN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600